of the plurality of facilities using the corresponding interface.

## REMARKS

Upon entry of the present amendment, claims 1, 8, 18, 24, 31 and 38 will have been amended to more clearly recite the claimed subject matter, while not substantially affecting or narrowing the scope of these claims. Applicants respectfully submit that all pending claims are now in condition for allowance.

More particularly, Applicants amended each of the independent claims pending in the present application at least to expressly recite "implementing" or "setting up" services in the body of each claim. The amendments are intended to clarify that the present invention is directed to initially *provisioning* DSL services by interfacing with multiple network facilities, as opposed to executing the previously provisioned services. The amendments do not narrow the scope of these claims, since they were already directed to provisioning DSL services, as indicated by the preamble and the substance of the body of each claim.

In the above-referenced Official Action, the Examiner rejected claim 1 under 35 U.S.C. § 102(b) as being anticipated by BARZEGAR et al. (U.S. Patent No. 6,363,079). The Examiner rejected claims 2-38 under 35 U.S.C. § 103(a) as unpatentable over BARZEGAR et al. in view of JONES (U.S. Patent No. 6,307,836). Applicants respectfully traverse these rejections, at least for the reasons stated below.

BARZEGAR et al. is directed to coordinating and executing various communication services, including transmission of voice, signaling and/or data, through multiple interfaced communications networks; they do not teach setting up DSL services on behalf of a DSL service subscriber.

BARZEGAR et al. is generally intended to providing interexchange carriers access to twisted-pair lines of customers before the lines are routed through the conventional local telephone network. This access enables connections initiated from the customer's terminal to be routed directly to whatever network or service the customer is entitled. See col. 2, lines 25-39. Referring to Fig. 2, BARZEGAR et al. focus on an intelligent services director (ISO) 22, a facilities management platform (FMP) 32 and a network server platform (NSP) 36, which interface digital and analog carrier networks and packet switched networks of interexchange carriers with high speed multiple access subscriber lines implemented over twisted pair lines.

None of these devices, however, is described in any detail in an initial provisioning capacity. In fact, BARZEGAR et al. never even mention typical service set up terms, such as "service order," "add," "change" and "delete." In other words, BARZEGAR et al. do not describe the process from when a subscriber requests a DSL service through the DSL service becoming available (and functional) at the subscriber customer premises equipment (CPE).

Likewise, none of the passages of text and figures referenced by the Examiner in the Official Action is directed to initial provisioning. For example, with respect to "assigning a plurality of facilities needed to implement the service order based on provisioning data ...," the Examiner cited Fig. 1 and col. 5, lines 28-35, of BARZEGAR et al. as relevant. However, Fig. 1 generally shows an embodiment of "hybrid fiber twisted pair local loop architecture," which enables access to customers' twisted-pair lines for efficient connection to the various interexchange carriers' networks, as discussed above. The text describes how the FMP 32 processes "data and/or analog/digitized voice between customer premise equipment (CPE) 10 and any number of networks." See col. 5,

lines 28-30. The description includes interconnecting the CPE 10 with any number of additional

networks, such as an InterSpan backbone 48, a PSTN 46, a call setup SS7-type network 44 and the

NSP 36, through a synchronous optical network (SONET) 42. However, the description does not

include initially assigning facilities for implementing service orders for a DSL service.

Likewise, the discussion of DSL services in BARZEGAR et al. is directed to executing

services, not provisioning services. For example, BARZEGAR et al. describe multiplexing voice

data digitized by the ISD 22 directly onto the digital backplane of a PSTN or modified digital loop

carrier, or formatting the data for transmission directly onto a digital network, such as an optical or

ATM network. DSL signals, in particular, are demodulated, for example, by tethered virtual radio

channel (TVRC) modems, while non-voice data may be output to a high speed backbone network,

such as an ATM network. See col. 5, lines 16-27; Fig. 4A. Clearly, this discussion of DSL is

directed to executing DSL services after they have been requested and implemented.

Accordingly, since BARZEGAR et al. do not disclose each and every element of claim 1 of

Applicants' invention, withdrawal of the rejection under 35 U.S.C., § 102(b) based on BARZEGAR

et al. is respectfully requested.

The Examiner relied on JONES et al. in combination with BARZEGAR et al. to reject claims

2-38 under 35 U.S.C. § 103(a). However, JONES et al. do not overcome the deficiencies of

BARZEGAR et al. Rather, the JONES et al. patent is likewise directed to executing as opposed to

provisioning services. For example, the Examiner asserted that JONES et al. disclose formatting

data from a service order into a common internal format prior to converting the service order into

provisionable steps, citing col. 3, lines 1-6, of JONES et al. However, the cited passage discloses

converting video and other high rate data into various network compatible formats to enable routing, not provisioning: "[An interface] device must also reside at the network end of the access loop to receive the signal and convert it to a form suitable for transport within the network which may use ATM, frame relay, TDM or other technologies." See col. 2, line 66-col. 3, line 6.

Applicants therefore respectfully submit that no proper combination of BARZEGAR et al. and JONES et al. teaches or suggests the subject matter of independent claims 1, 8, 18, 24, 31 and 38 of the present invention. Accordingly, withdrawal of the rejections based on the combination of these references is respectfully requested.

With regard to claims 2-7, 9-17, 19-23, 25-30 and 32-37, Applicants assert that they are allowable at least because they depend from independent claims 1, 8, 18, 24 and 31, respectively, which the Applicants submit have been shown to be allowable.
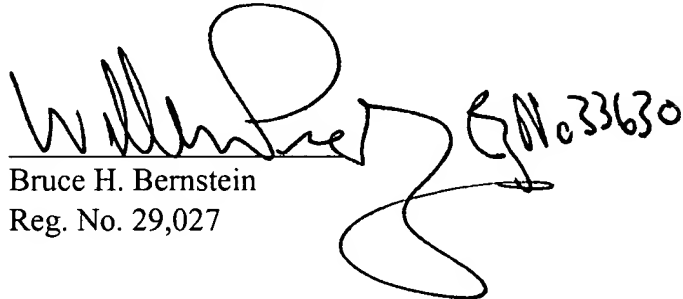
In view of the herein contained amendments and remarks, Applicants respectfully request reconsideration and withdrawal of previously asserted rejections set forth in the Official Action of April 2, 1993, together with an indication of the allowability of all pending claims, in due course. Such action is respectfully requested and is believed to be appropriate and proper.

Any amendments to the claims have not been made to overcome a rejection based upon the prior art, and should be considered to have been made for a purpose unrelated to patentability. Accordingly, no estoppel should be deemed to attached thereto.

P20422.A04

Should the Examiner have any questions concerning this Reply or the present application,

the Examiner is respectfully requested to contact the undersigned at the telephone number listed

below.

Respectfully submitted,
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10

## MARKED UP COPY OF CLAIMS

1. (Amended) A method for provisioning a digital subscriber line (DSL) service for a subscriber in a telecommunications network, the method comprising:

receiving [at a provisioning server] a service order requesting implementation of the DSL service [from a service order entry system], the service order comprising provisioning data;

assigning a plurality of facilities [needed] to implement the service order based on the provisioning data [indicated by the service order], the plurality of facilities comprising at least a remote terminal connectable to a terminal of [a] the DSL subscriber [and an optical concentrator device connectable to the remote terminal];

determining an interface corresponding to each of the plurality of facilities, each interface converting [the service order] at least a portion of the provisioning data into a specific protocol corresponding to the assigned facility; and

configuring each of the plurality of facilities, using the corresponding interface, to implement the service order based on [instructions from] the provisioning [server] data.

8. (Amended) A method for provisioning a digital subscriber line (DSL) service in a telecommunications network for a subscriber, the method comprising:

receiving a service order, at a common server [via a service order entry system, the service order], requesting set up of the DSL service [corresponding to a DSL subscriber];

converting the service order into provisionable steps;

determining facility assignment data related to each of a plurality of facilities needed to implement the provisionable steps, the facility assignment data comprising identification of at least

a remote terminal and a subscriber port, connectable to a terminal of the DSL subscriber, and an optical concentrator device connectable to the remote terminal;

determining an interface for each of the plurality of facilities, each interface enabling communication with the corresponding one of the plurality of facilities; and

configuring each of the plurality of facilities to implement the service order based on instructions communicated from the common server to each of the plurality of facilities using the corresponding interface.

18. (Amended) A system for provisioning a digital subscriber line (DSL) service in a telecommunications network, the system comprising:

a server that receives a service order for <u>implementing</u> the DSL service [from a service order entry system];

a plurality of network facilities connectable to the server [and a terminal of a DSL subscriber]; and

a system database that stores the service order and a plurality of <u>interface identifiers for</u> interfaces corresponding to the plurality of network facilities;

wherein the server assigns provisioning facilities from among the plurality of network facilities needed to implement the service order, the provisioning facilities comprising at least one remote terminal<u>, connectable to a terminal of a subscriber of the DSL service</u> [and at least one optical concentrator device, the remote terminal being connectable to the optical concentrator device via an optical fiber line]; and

wherein the server directs configuration of each of the provisioning facilities, using [an] <u>at</u>

least one of the interface [identifier] identifiers retrieved from the system database corresponding to each of the provisioning facilities, to implement the DSL service based on the service order.

24. (Amended) A system for provisioning a digital subscriber line (DSL) service in a telecommunications network, the system comprising:

a service order entry system that receives a service order for the DSL service from a DSL service provider;

a server that receives the service order from the service order entry system;

a plurality of network facilities connectable to the server and a terminal of a subscriber [desiring] of the DSL service;

a facility inventory system connected to the server that stores facility information regarding each of the plurality of network facilities, the facility information comprising a type, a location and an availability of each of the plurality of network facilities; and

a system database connected to the server that stores data relating to the service order and a plurality of interfaces corresponding to the plurality of network facilities;

wherein the server communicates with the facility inventory system to determine provisioning facilities from among the plurality of network facilities needed to implement the DSL service based on the service order [received from the service order entry system], the provisioning facilities comprising at least one remote terminal [and] having a subscriber port and at least one optical concentrator device, the remote terminal being connectable to the optical concentrator device via an optical fiber line; and

wherein the server directs configuration of each of the provisioning facilities using a

corresponding one of the plurality of interfaces retrieved from the system database to implement the [service order] DSL service.

31. (Amended) A computer readable medium for storing a computer program that provisions a digital subscriber line (DSL) service in a telecommunications network, the computer readable medium comprising:

a receiving source code segment that receives a service order requesting implementation of the DSL service [from a service order entry system];

an assigning source code segment that assigns a plurality of facilities needed to implement the service order based on provisioning data indicated by the service order, the plurality of facilities comprising at least a remote terminal connectable to a terminal of a DSL subscriber and an optical concentrator device connectable to the remote terminal;

a determining source code segment that determines an interface corresponding to each of the plurality of facilities, each interface converting the service order data into a specific protocol corresponding to the assigned facility; and

a configuring source code segment that configures each of the plurality of facilities, using the corresponding interface, to implement the [service order] DSL service based on [instructions from a provisioning server] the service order.

38. (Amended) A computer readable medium for storing a computer program that provisions a digital subscriber line (DSL) service in a telecommunications network, the computer readable medium comprising:

a receiving source code segment that receives a service order at a common server via a

service order entry system, the service order [corresponding to] <u>requesting that the DSL service be</u> <u>set up for</u> a DSL subscriber;

a converting source code segment that converts the service order into provisionable steps;

a facility assignment source code segment that determines facility assignment data related to each of a plurality of facilities needed to implement the provisionable steps, the facility assignment data comprising identification of at least a remote terminal and a subscriber port, connectable to a terminal of the DSL subscriber, and an optical concentrator device connectable to the remote terminal;

an interface determining source code segment that determines an interface for each of the plurality of facilities, each interface enabling communication with the corresponding one of the plurality of facilities; and

a configuring source code segment that configures each of the plurality of facilities to implement the service order based on instructions communicated from the common server to each of the plurality of facilities using the corresponding interface.